

Serial No. 10/014,501

In the Claims:

Claims 1-3. (canceled)

4. (currently amended) An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence that encodes an amino acid sequence shown in SEQ ID NO:2;

(b) ~~a nucleotide sequence that encodes of an allelic variant of an amino acid sequence shown in SEQ ID NO:2, wherein said nucleotide sequence hybridizes under stringent conditions to the opposite strand of a nucleic acid molecule shown in SEQ ID NOS:1 or 3;~~ a nucleotide sequence comprising the nucleic acid sequence of SEQ ID No: 1;

(c) ~~a nucleotide sequence that encodes an ortholog of an amino acid sequence shown in SEQ ID NO:2, wherein said nucleotide sequence hybridizes under stringent conditions to the opposite strand of a nucleic acid molecule shown in SEQ ID NOS:1 or 3;~~ a nucleotide sequence comprising the nucleic acid sequence of SEQ ID No: 3;
and

(d) ~~a nucleotide sequence that encodes a fragment of an amino acid sequence shown in SEQ ID NO:2, wherein said fragment comprises at least 10 contiguous amino acids; and~~

(e) a nucleotide sequence that is the complement of a nucleotide sequence of (a)-(c) ~~(d)~~.

Claims 5-7 (canceled)

8. (currently amended) A nucleic acid vector comprising a nucleic acid molecule of claim ~~4~~ 5.

9. (original) A host cell containing the vector of claim 8.

Claims 10-23 (canceled)

24. (new) A process for producing a polypeptide comprising culturing the host cell of claim 9 under conditions sufficient for the production of said polypeptide, and recovering the peptide from the host cell culture.

25. (new) An isolated polynucleotide comprising a nucleotide sequence set forth in SEQ ID NO:1.

26. (new). An isolated polynucleotide comprising a nucleotide sequence set forth in SEQ ID NO:3.

27. (new). A vector according to claim 8, wherein said vector is selected from the group consisting of a plasmid, virus, and bacteriophage.

28. (new). A vector according to claim 8, wherein said isolated nucleic acid molecule is inserted into said vector in proper orientation and correct reading frame such that the protein of SEQ ID NO: 2 may be expressed by a cell transformed with said vector.

29. (new). A vector according to claim 28, wherein said isolated nucleic acid molecule is operatively linked to a promoter sequence.

30 (new). An isolated nucleic acid molecule encoding a human protease peptide, said nucleic acid molecule sharing at least 95% percent homology with a nucleic acid molecule shown in SEQ ID NOS:1 or 3.

31 (new). A nucleic acid molecule according to claim 4 that shares at least 90 percent homology with a nucleic acid molecule shown in SEQ ID NOS:1 or 3.

- 32 (new). A nucleic acid vector comprising a nucleic acid molecule of claim 31.
- 33 (new). A host cell containing the vector of claim 32.
34. (new) A process for producing a polypeptide comprising culturing the host cell of claim 33 under conditions sufficient for the production of said polypeptide, and recovering the peptide from the host cell culture.
35. (new). A vector according to claim 32, wherein said vector is selected from the group consisting of a plasmid, virus, and bacteriophage.
36. (new). A vector according to claim 32, wherein said isolated nucleic acid molecule is inserted into said vector in proper orientation and correct reading frame such that the protein of SEQ ID NO: 2 may be expressed by a cell transformed with said vector.
37. (new). A vector according to claim 36, wherein said isolated nucleic acid molecule is operatively linked to a promoter sequence.